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EXAMINER

WILSON, BRIAN P

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2612

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,063	Applicant(s) WITTENBER ET AL.	
	Examiner Brian Wilson	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8-17-2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-20 are currently pending

Claim Objections

1. Claim 8 objected to because of the following informalities: Meta-state *steep*, should be *sleep*. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 12, 13, 17, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by West (U.S. Pub 2002/0013517).

Regarding claim 1, West teaches a method for paging/finding (**Fig. 2, item 20 & [0073, lines 11-15] note, audible notification to patient**) a wireless patient-monitoring device (**Fig. 2, items 22a & 22b**) in a WLAN network (**Fig. 2, item 30**), comprising the steps of: (a) determining a status of a radio module (**[0146, lines 10-17] note, active/sleep power management modes responsive to communications with central monitoring station**) of one or more wireless monitoring devices comprising one of a Patient-Wearable Device (**Fig. 2, item 22a**) and a Patient-Monitoring Device (**Fig. 2, item 22b**) that are adapted for dual-communication (**Fig. 2,**

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item 30; [0038] note, access points convey communications between patient monitors and central monitoring stations) with one or more Access Points (**Fig. 2, items 26**) and a central-monitoring station (**Fig. 2, item 24**) in a WLAN, wherein an overall status of the PWD/PMD comprises one of a plurality of meta-states (**[0056] note, patient monitors can be in/out of range & associated/unassociated with an access point**); (b) selecting a particular PWD/PMD for receipt of wireless transmission of a signal for changing a meta-state of the device to a desired state if a current state of the particular PWD/PMD is not in the desired state (**[0146, lines 10-17] note, active/sleep power management modes responsive to communications with central monitoring station**); and, (c) activating an audial-code function of the particular PWD/PMD by transmitting an instruction signal to the particular PWD/PMD to emit a predetermined first audial-code that can be heard at least by a patient being monitored by the particular PWD/PMD. (**[0073] note, buzzer and siren**)

Regarding claim 12, West teaches a page/find system (**Fig. 2, item 20 & [0073, lines 11-15] note, audible notification to patient**) for wireless medical monitoring devices comprising (**Fig. 2, items 22a & 22b**): at least one of a central-monitoring station (**Fig. 2, item 24**) and a plurality of Access Points (**Fig. 2, items 26**); a plurality of wireless medical monitoring devices comprising one of a patient wearable device (**Fig. 2, item 22a**) and a Patient Monitoring Device (**Fig. 2, item 22b**) that are adapted for dual-communication with the plurality of Access Points and the central-monitoring station in a WLAN (**Fig. 2, item 30; [0038] note, access points convey communications between patient monitors and central monitoring stations**), wherein the PWD/PMD devices include a plurality of meta-states (**[0056] note, patient monitors can be**

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in/out of range & associated/unassociated with an access point); wherein at least said one central monitoring station and plurality of Access Points broadcasts a page/find message to a particular PWD/PMD that signals the particular wireless medical-monitoring device to emit an audial tone at a predetermined volume that can be heard by a patient. **([0073] note, buzzer and siren)**

Regarding claim 13, West further teaches wherein the first audial tone emitted by the particular PWD/PMD comprises a tone that indicates a call nurse function. **([0073, lines 11-15] note, audible notification to a patient)**

Regarding claim 17, West teaches a patient monitoring device comprising **(Fig. 2, items 22a & 22b)**: means for monitoring certain physiological responses of a patient **(Fig. 7, item 82)**; a radio module **(Fig. 7, items 90 & 104)** that communicates with one of a central-monitoring station **(Fig. 2, item 24)** or a plurality of Access Points **(Fig. 2, item 26)**; audial-code emission means **(Fig. 7, item 92)**, wherein in response to receipt of a signal, said device emits an audial-code indicating a nurse-call function. **([0073, lines 11-15] note, audible notification to a patient)**

Regarding claim 18, West teaches a patient monitoring device comprising **(Fig. 2, items 22a & 22b)**: means for monitoring certain physiological responses of a patient **(Fig. 7, item 82)**; a radio module **(Fig. 7, items 90 & 104)** that communicates with one of a central-monitoring station **(Fig. 2, item 24)** or a plurality of Access Points **(Fig. 2, item 26)**; and audial-code emission unit **(Fig. 7, item 92)**, wherein in response to receipt of a signal, said device activates a transducer

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that emits a first audial code at a volume sufficient for a patient to become aware that a nurse-call function has occurred ([0073, lines 11-15] **note, audible notification to a patient**); and, an acknowledgement button that when activated indicates that a nurse-call function has been acknowledged by the patient. **(Fig. 7, items 84, 86; Fig. 20)**

Regarding claim 20, West further teaches wherein the audial-emission unit includes a light. **(Fig. 20; [0072], note indicator lights and LCD display)**

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 5-7, 11, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (U.S. Pub 2002/0013517) in view of Haller (U.S. Pub 2001/0051787).

Regarding claims 2-3, West teaches the method according to claim 1.

However, West does not teach

- wherein the audial code in step (c) causes the particular PWD/PMD to emit a specific tone which provides an instruction for the patient to contact a nurse, and play a prerecorded/preprogrammed message to the patient.

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Haller teaches

- wherein the audial code in step (c) causes the particular PWD/PMD to emit a specific tone which provides an instruction for the patient to contact a nurse ([0169, lines 22-25] **note, audio and instruction “go to the hospital”**), and play a prerecorded/preprogrammed message to the patient. ([0169, lines 22-25] **note, these instructions are pre-recorded before they are sent to the IMD/Comm module**)

It would have been obvious to one of ordinary skill in the art to combine West's audible notification with Haller's audio/visual instructions. By being able to remotely notify a patient, a nurse's time can be used more efficiently by eliminating the need to visit a patient's room to remind them to take their medication.

Regarding claims 5-6, and 16; West teaches the method/system according to claims 1, and 12 respectively.

However, West does not explicitly teach

- wherein determining of the status in step (a) of an RM of one or more wireless devices occurs by polling the one or more Access Points via unicasting, and PIC based broadcasting.

Haller teaches

- wherein determining of the status in step (a) of an RM of one or more wireless devices occurs by polling the one or more Access Points via unicasting ([0223] **note, remote station interrogates one communication module**), and PIC based broadcasting ([0223] **note, remote station can interrogate multiple communication modules**).

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It would have been obvious to one of ordinary skill in the art to combine West's patient monitoring device/system with Haller's unicasting/broadcasting. This allows the remote/central monitoring station to contact one patient monitoring device that may need to administer therapy to a patient; or contact multiple devices that may need new software/application upgrades.

Regarding claims 7, and 15; West teaches the method/system according to claims 1, and 12 respectively.

West further teaches

- wherein the RM of one or more PWD/PMDs uses a Wireless Medical Telemetry System WLAN based protocol. ([0045] **note, standard data communication protocols**)

However, West does not teach

- wherein the RM of one or more PWD/PMDs uses a Wireless Medical Telemetry System WLAN *DECT*-based protocol.

Haller teaches

- *DECT* ([0119])

It would have been obvious to one of ordinary skill in the art to replace West's protocol with Haller's DECT protocol, because this protocol offer good security and supports bi-directional communication between a central monitoring station and patient monitoring devices.

Regarding claim 11, West teaches the method according to claim 7. West further teaches wherein the PWD/PMD periodically broadcasts the status to the one or more Access Points if the device has not been polled by a predetermined amount of time. ([0099] **note, that patient**

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monitor recognizes communications have been lost and attempts restore communications with an access point)

5. Claims 4, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (U.S. Pub 2002/0013517) in view of Gum (U.S. Patent 6,363,247) as applied to claims 1, 12, and 18 respectively.

Regarding claims 4, 14, and 19; West teaches the method/system/device according to claims 1, 12, and 18.

However, West does not teach

- wherein a second audial code played at a sufficiently loud enough volume sufficient to permit personnel that are unaware of the wireless device's location to locate the wireless device by listening for the second audial code.

Gum teaches

- a second audial code played at a sufficiently loud enough volume sufficient to permit personnel that are unaware of the wireless device's location to locate the wireless device by listening for the second audial code. **(Col. 1, lines 46-48, 56-59, and 62-65; also refer to claim 4)**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine West's patient monitoring device with an audible notification and Gum's audible beacon device, because this would help the hospital staff locate an incapacitated patient lost in a

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hospital that needs assistance, thus eliminating room-to-room searching and saving precious time.

6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (U.S. Pub 2002/0013517) in view of Haller (U.S. Pub 2001/0051787) as applied to claim 7 above, and further in view of IEEE 802.11 Std, 1999 Edition (R2003), Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications.

Regarding claim 8, West in view of Haller teach the method according to claim 7.

West further teaches

- wherein the overall status of the plurality of meta-states of the PWD/PMD in step (a) includes operational ([0146, lines 10-17] **note, active**), standby ([0146, lines 10-17] **note, active**), PIC-associated ([0088] **note, this would be the association with the connection of the physical data transport structure**), PIC-unassociated ([0088] **note, there would be no association with the connection of the physical data transport structure**), PIC-connected ([0088] **note, this would be the connection with physical data transport structure**), PIC-Unconnected ([0088] **note, there would be no connection with physical data transport structure**), AP-associated ([0088]), AP-unassociated ([0088]), and a designated out-of-range state ([0097]) if the particular PWD/PMD selected in step (a) does not respond.

However, West does not explicitly teach

- *steep, active, locked, seeking, inactive, active timing, and inactive timing*

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IEEE Std teaches

- *steep, active, locked, seeking, inactive, active timing, and inactive timing.* (pg. 129, section 11.2.1.1; lines 6-7 note, power management modes active and doze/sleep, in sleep mode a device is locked so that it can respond to request from access points; Referring to Table 23/Power Save or PS box, note, STA listens which is a seeking mode; lines 17-19 note, for active/inactive timing, probe delay time periods may or may not be used for changing to active/doze modes)

It would have been obvious to one of ordinary skill in the art to use West's patient device system in accordance to the IEEE 802.11 Std. By utilizing the 802.11 stands the patient monitoring device power management modes can be operated with greater efficiency, thus conserving battery power and communicating vital signs to the central monitoring station.

Regarding claim 9, West in view of Haller, in further view of the IEEE 802.11 Std teach the method according to claim 8. West further teaches wherein the meta-state in step (b) of the RM of the particular PWD/PMD is changed to an active state. ([0146, lines 10-17] note, active/sleep power management modes responsive to communications with central monitoring station)

Regarding claim 10, West teaches the method according to claim 8. West further teaches wherein the meta-states further include: IP aware & booting ([0089, line 5] note, booting the permanent IP address), IP-unaware & rebooting ([0089, lines 6-7] note, rebooting a temporary IP address).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mendard (U.S. Patent 7,088,233) discloses an ambulatory patient monitoring system in a WLAN-DECT network. Ghiazza (U.S. Patent 6,397,053) discloses a power management method for wireless devices in a DECT system. Thompson (U.S. Patent 6,083,248) discloses a world wide patient monitoring system with page/find capabilities. Carter (U.S. Patent 6,659,947) discloses a WLAN-WMTS patient monitoring system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Wilson whose telephone number is (571)270-5884. The examiner can normally be reached Monday-Thursday from 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571)272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/B. W./
Examiner, Art Unit 2612

/Jeff Hofsass/
Supervisory Patent Examiner, Art Unit 2612